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# THERAPEUTIC PATIENT EDUCATION (TPE) IN STROKE: EFFICACY OF LAY -LOOK AFTER YOURSELF- SELF-MANAGEMENT PROGRAM

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## Introduction

Guidelines recommend Therapeutic Patient Education (TPE) in stroke patients, but there are no strong evidences of efficacy (variability in type, timing and setting of existing programs).

**Aim:** to develop and evaluate the efficacy of a standardized TPE program on empowerment of self-management (SM) for stroke inpatient and facilitation of social reintegration after rehabilitation discharge.

## Materials and Methods

**Design:** controlled clinical trial in 3 rehabilitation centers: S.Orsola Bologna (BO), Reggio Emilia (RE), Baggiovara (MO). Usual Care data were preliminarily collected in the 3 centres to check for comparability.

**Patients:** Intervention phase: 120 intervention group (IG: RE+MO); 120 control group (CG: BO).

**Inclusion criteria:** first stroke, >18 ys, caregiver, moderate-severe disability (MBI-Modified Barthel Index<70), no severe communication or cognitive impairment (MMSE-Mini Mental State Examination>15).

**Primary outcome:** patient perceived self efficacy (SSEQ-Stroke Self Efficacy Questionnaire)








**Assessments:** T0 (enrollment), T1 (inpatient rehabilitation discharge), T2 (50-60 days after discharge): SSEQ, MBI, Short Physical Performance Battery, Geriatric Depression Scale, SF-12, patient and caregiver’s satisfaction, Caregiver Strain Index. At T2 also: % of homecoming, lenght of stay, territorial services use.

## Results

**UC phase:** statstical analisys confirmed homogeneity of the 3 centers before intervention. Significant improvements (p < 0.001) T0-T1 in self-efficacy (SSEQ), functional status (BIM), SF-12 physical component and balance (SPPB).

**Intervention phase:** TPE intervention was set up defining contents, timing, modality (6 group and 3 individual sessions directed by rehabilitation specialists). The program is an adaptation of the Chronic Disease Self Management Program (Stanford) for stroke patients and caregivers. The focus is the training on goal setting and problem solving.

## LAY program

GROUP SESSION 0	<ul style="list-style-type: none"><li>• STROKE and RISK FACTORS</li><li>• REHABILITATION</li></ul>	
INDIVIDUAL SESSION 1	<ul style="list-style-type: none"><li>• GOAL SETTING and ACTION PLANS</li><li>• SELF-MANAGEMENT SKILLS</li></ul>	
GROUP SESSION 1	<ul style="list-style-type: none"><li>• PROBLEM SOLVING</li><li>• SELF-MANAGEMENT</li><li>• USING MIND</li><li>• MANAGING DIFFICULT EMOTIONS</li></ul>	
GROUP SESSION 2	<ul style="list-style-type: none"><li>• PROBLEM SOLVING</li><li>• SELF-MANAGEMENT</li><li>• HELP REQUEST</li><li>• SLEEP QUALITY</li></ul>	
INDIVIDUAL SESSION 2	<ul style="list-style-type: none"><li>• RISK OF FALLS</li><li>• RAISE FROM A FALL</li><li>• BALANCE EXERCISES</li></ul>	
GROUP SESSION 3	<ul style="list-style-type: none"><li>• PROBLEM SOLVING</li><li>• DRUGS MANAGEMENT</li><li>• PAIN and FATIGUE MANAGEMENT</li></ul>	
GROUP SESSION 4	<ul style="list-style-type: none"><li>• PROBLEM SOLVING</li><li>• HEALTHY EATING</li><li>• FALLS PREVENTION</li></ul>	
GROUP SESSION 5	<ul style="list-style-type: none"><li>• PROBLEM SOLVING</li><li>• EXERCISES and PHYSICAL ACTIVITY</li><li>• TERRITORIAL SERVICES</li><li>• LOOKING BACK and TO THE FUTURE</li></ul>	

The LAY project is still ongoing. Until now:

- **IG:** 288 screened, 78 enrolled; 22 drop out.
- **CG:** 331 screened, 127 enrolled; 10 drop out.

Compliance to sessions is 84% for inpatient people but decreases at 49.5% when they are discharged. Action plans are built in 83% of cases. Only 32.5% of stroke survivors match the inclusion criteria and the drops out are more than expected.

**Patients perceptions:** potential benefits of Action Planning and goal setting, difficulty to be an active self-manager in the early post-stroke phase, need of holistic support, the program fits their need of information.

**Caregiver perceptions:** need to implement a program for caregivers.

**Health professionals perceptions:** in early phases after a stroke patients are physically and emotionally fragile, the program could be difficult because of limited span of attention, fatigue and cognitive impairments; adaptation to patient performances is strongly needed.

## Conclusions

The LAY project represents an effort to stadardize a TPE intervention for stroke survivors in early rehabilitation phase and it will define patients characteristics for a feasible program to support SM.

## References

Lorig K et al. (2004) A national dissemination of an evidence-based self-management program: a process evaluation study (Patient Education and Counseling 59:69–7); Lennon S et al. (2013) Self management programs for people post stroke: a systematic review (Clin Rehabil); Parke HL et al. (2015) Self management interventions for stroke survivors: a systematic meta-review (PLoS ONE 10(7))